

Fig. 3

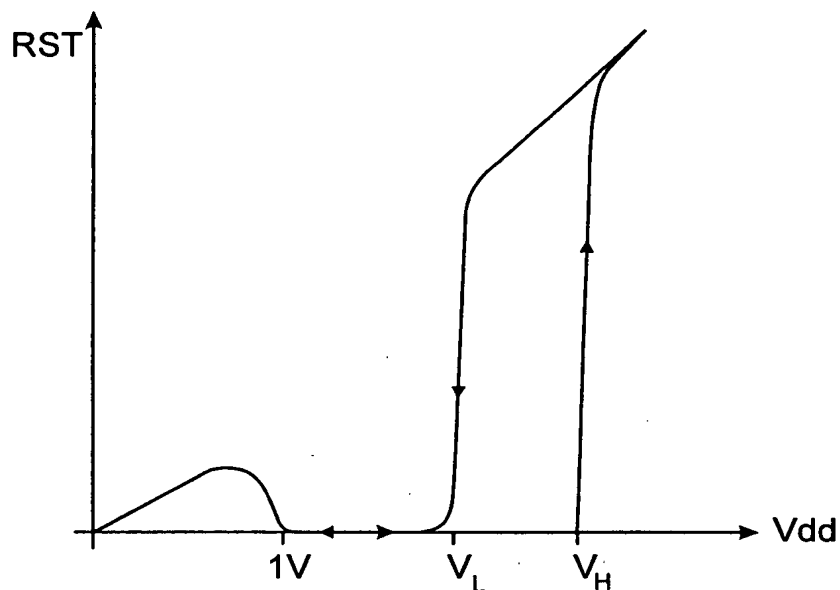
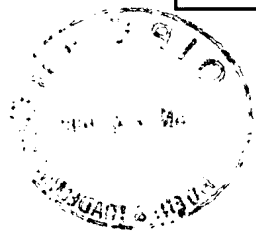


Fig. 4

MICROPROCESSOR		ANTENNA INTERFACE	
CONTACT MODE	CONTACTLESS MODE	CONTACT MODE	CONTACTLESS MODE
$V_{dd} = \square$ $RST = \square$ $CLK = \square\square\square$ $IO_2 = 0 \Rightarrow C.M$ DATA via $IO_1$ $C.M \left\{ \begin{array}{l} \text{data trans-} \\ \text{action} \end{array} \right.$ ISO 7816	$V_{dd} = \nearrow$ $RST = \square$ $CLK = \square\square\square$ $IO_2 = 1 \Rightarrow C / L$ DATA via $IO_2$ $C/L \left\{ \begin{array}{l} \text{data trans-} \\ \text{action} \end{array} \right.$ CONTACTLESS PROTOCOL	$V_{dd} = \square$ $RST, CLK =$ TRISTATE E / M FIELD OFF $\Rightarrow C.M. \text{ MODE}$	$V_{dd} = \nearrow$ $RST = \square$ $CLK = \square\square\square$ E / M FIELD ON $\Rightarrow C/L. \text{ MODE}$ DATA TRANS- ACTION via $IO_2$

Fig. 5



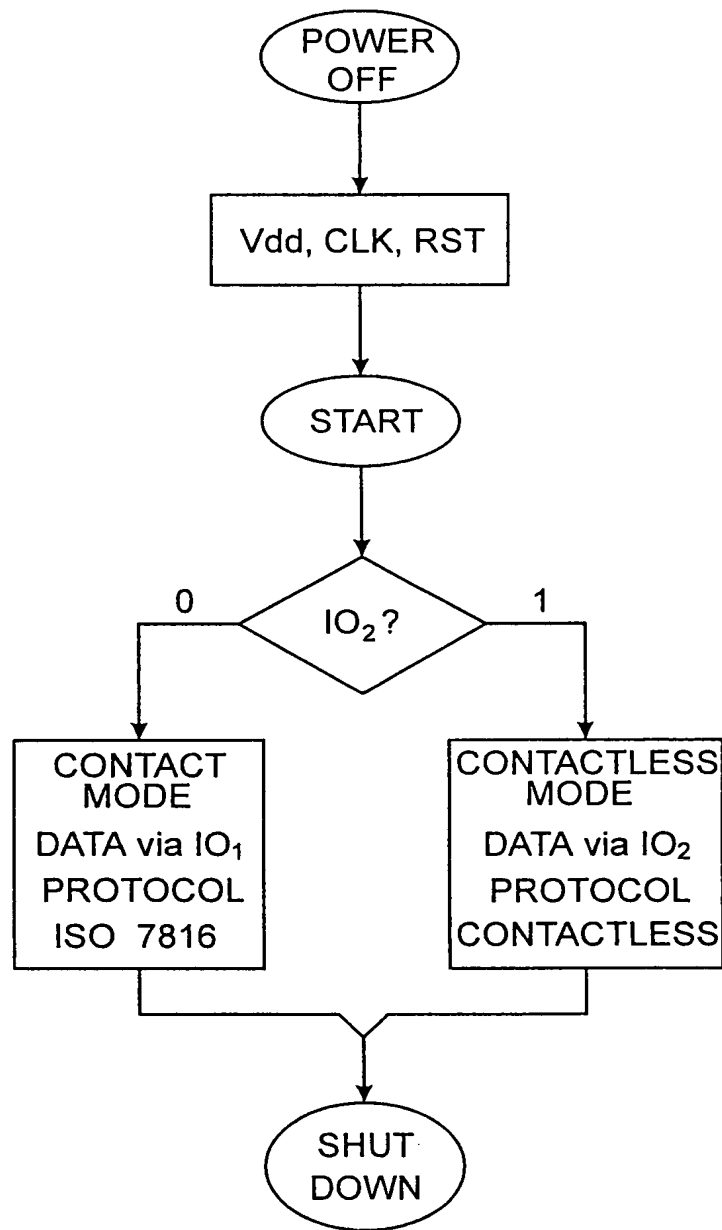


Fig. 6



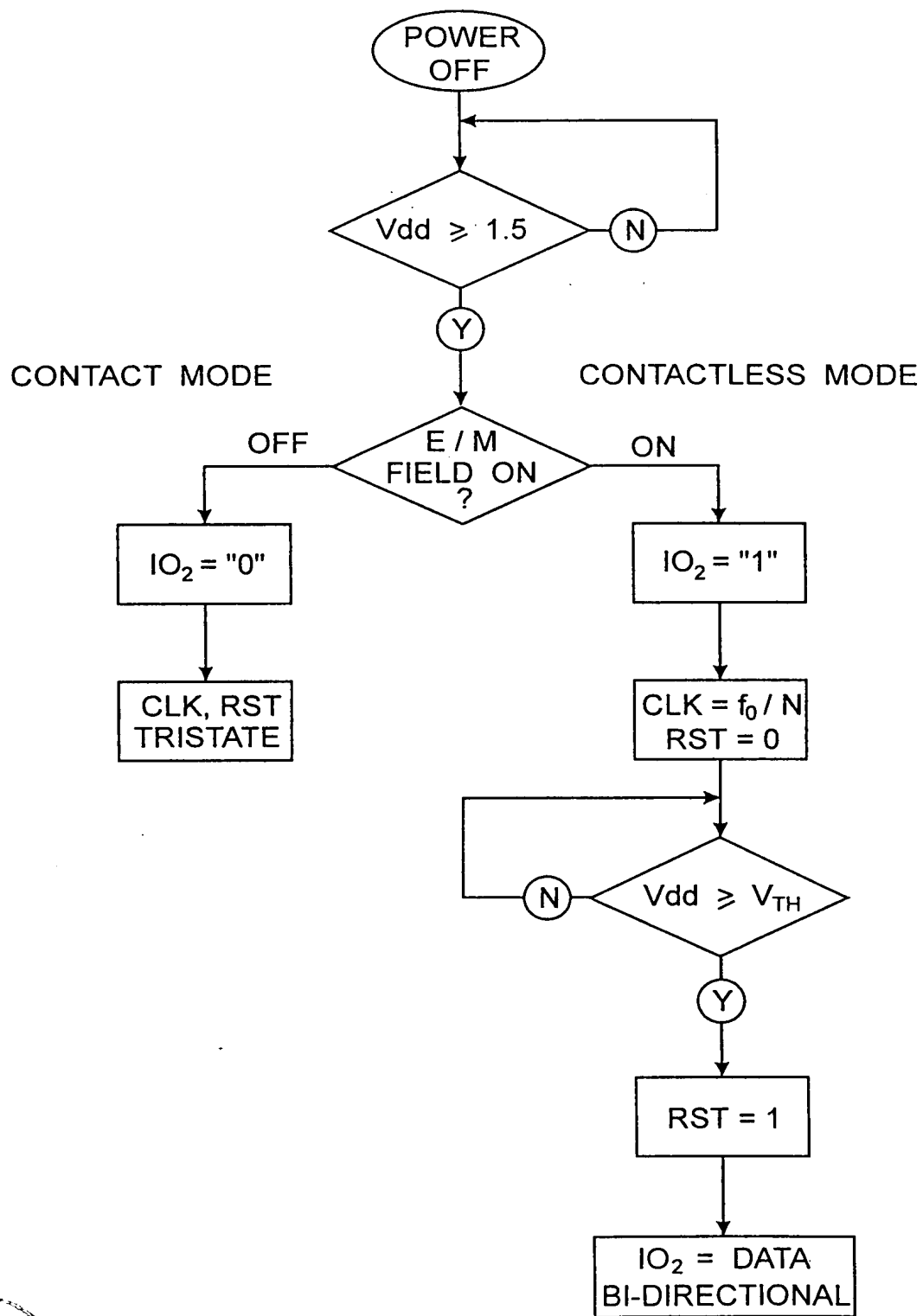


Fig. 7

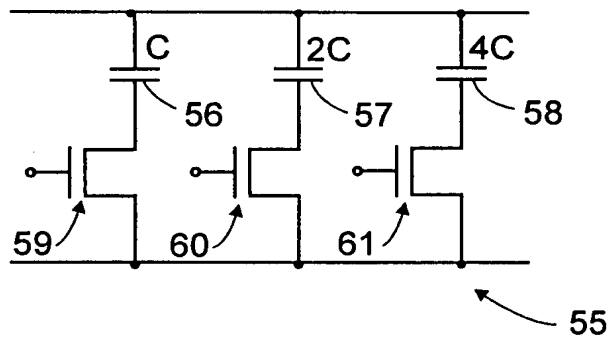


Fig. 8 a

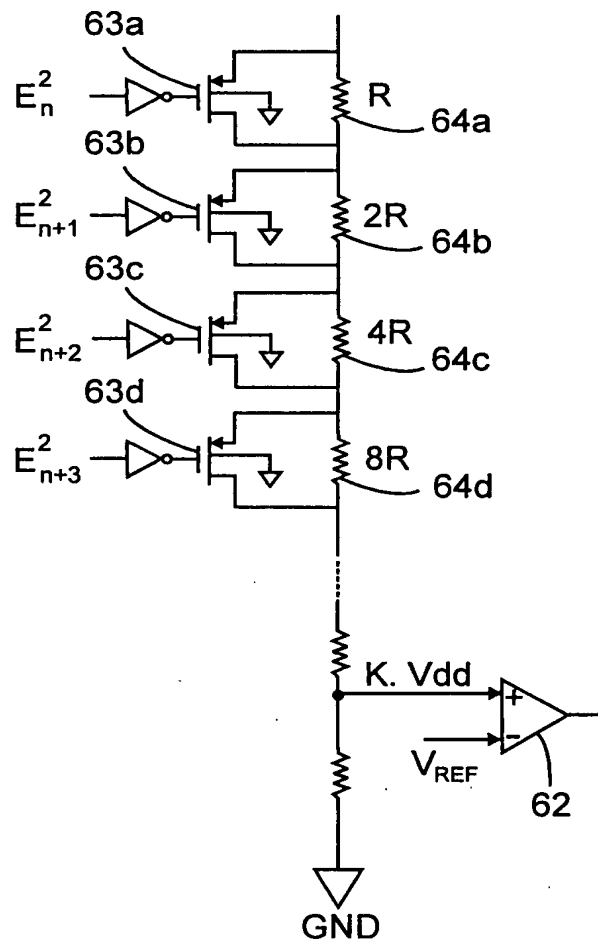
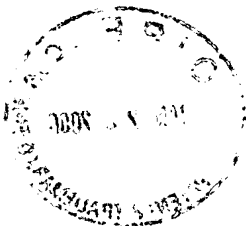
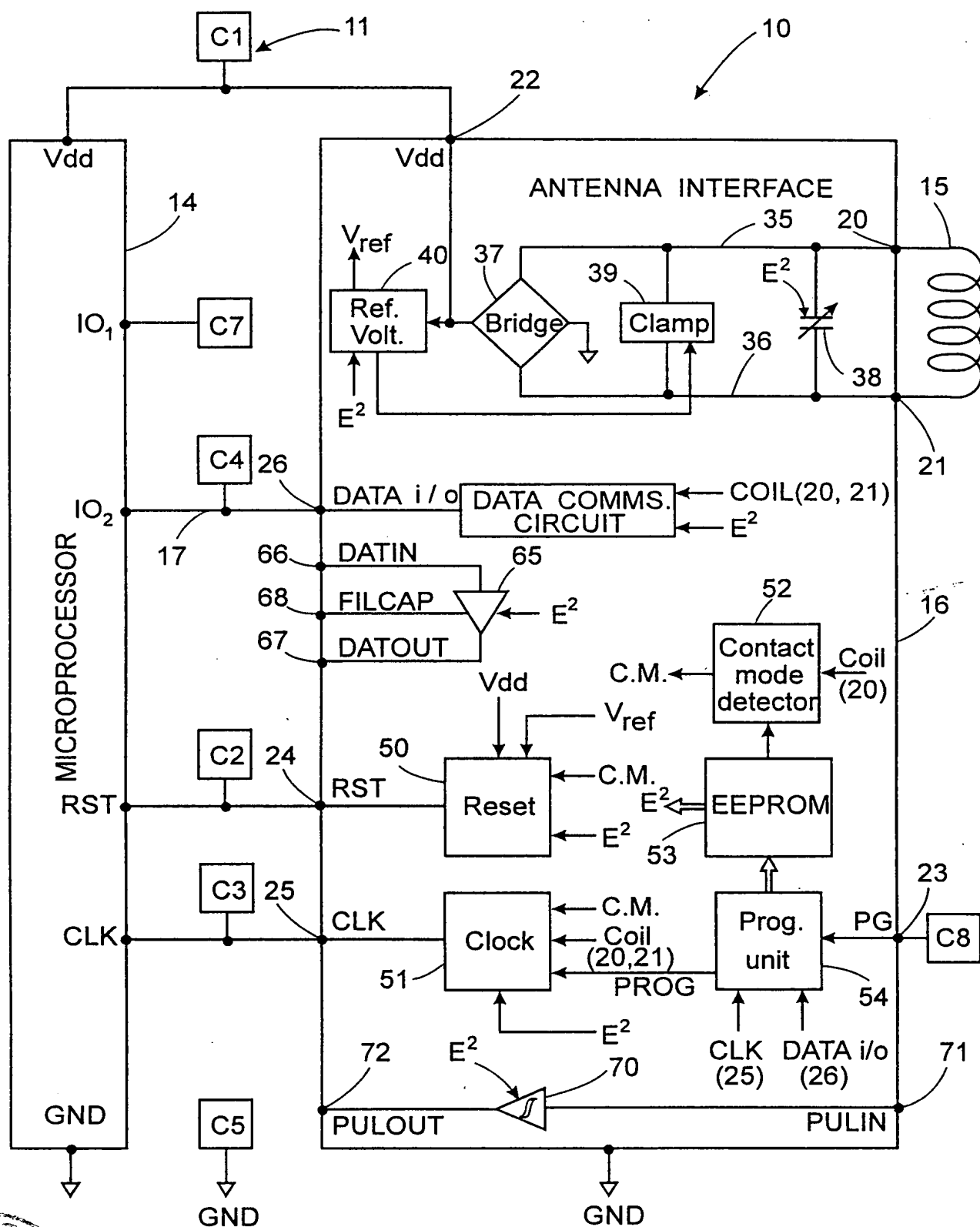


Fig. 8 b





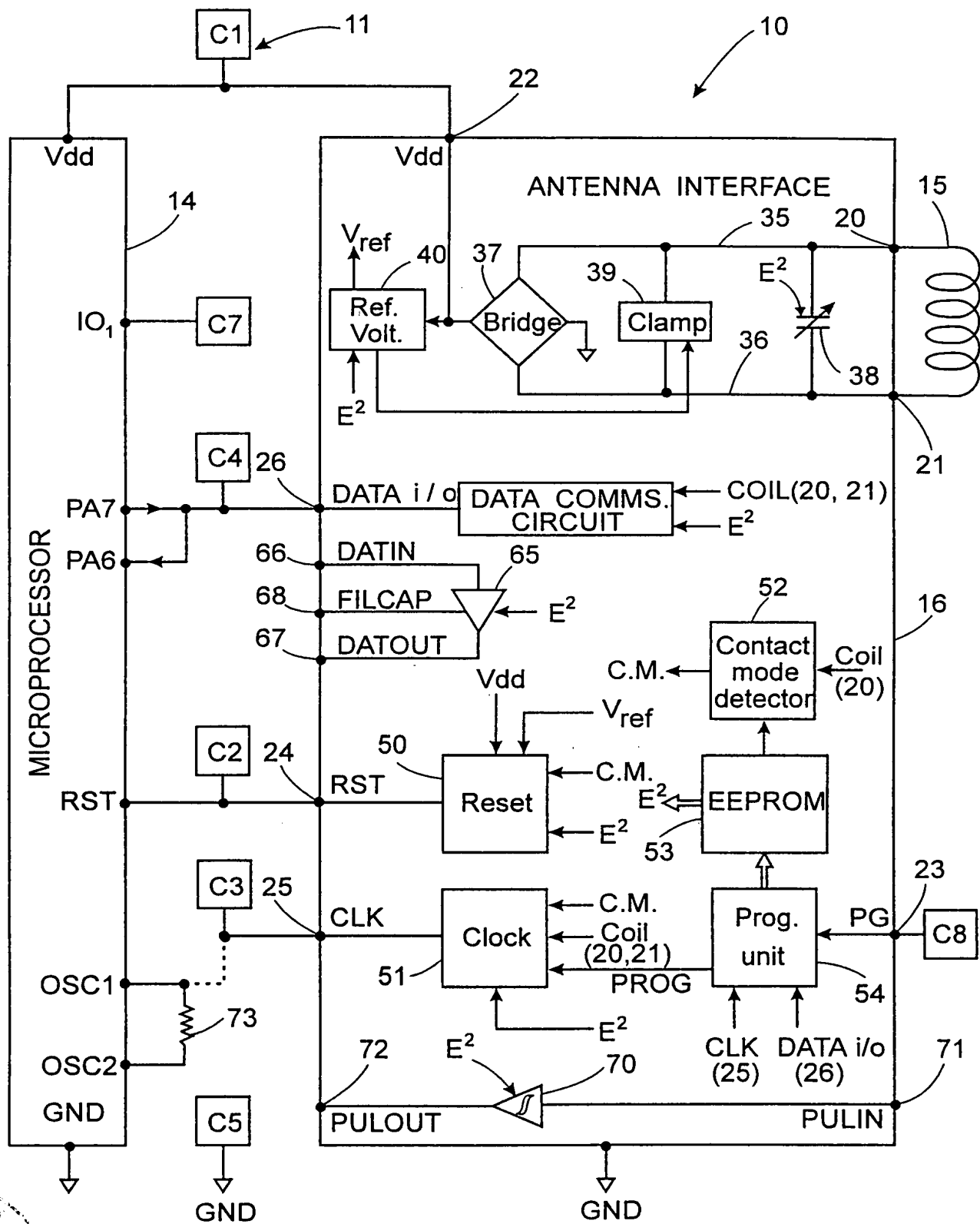


Fig. 10



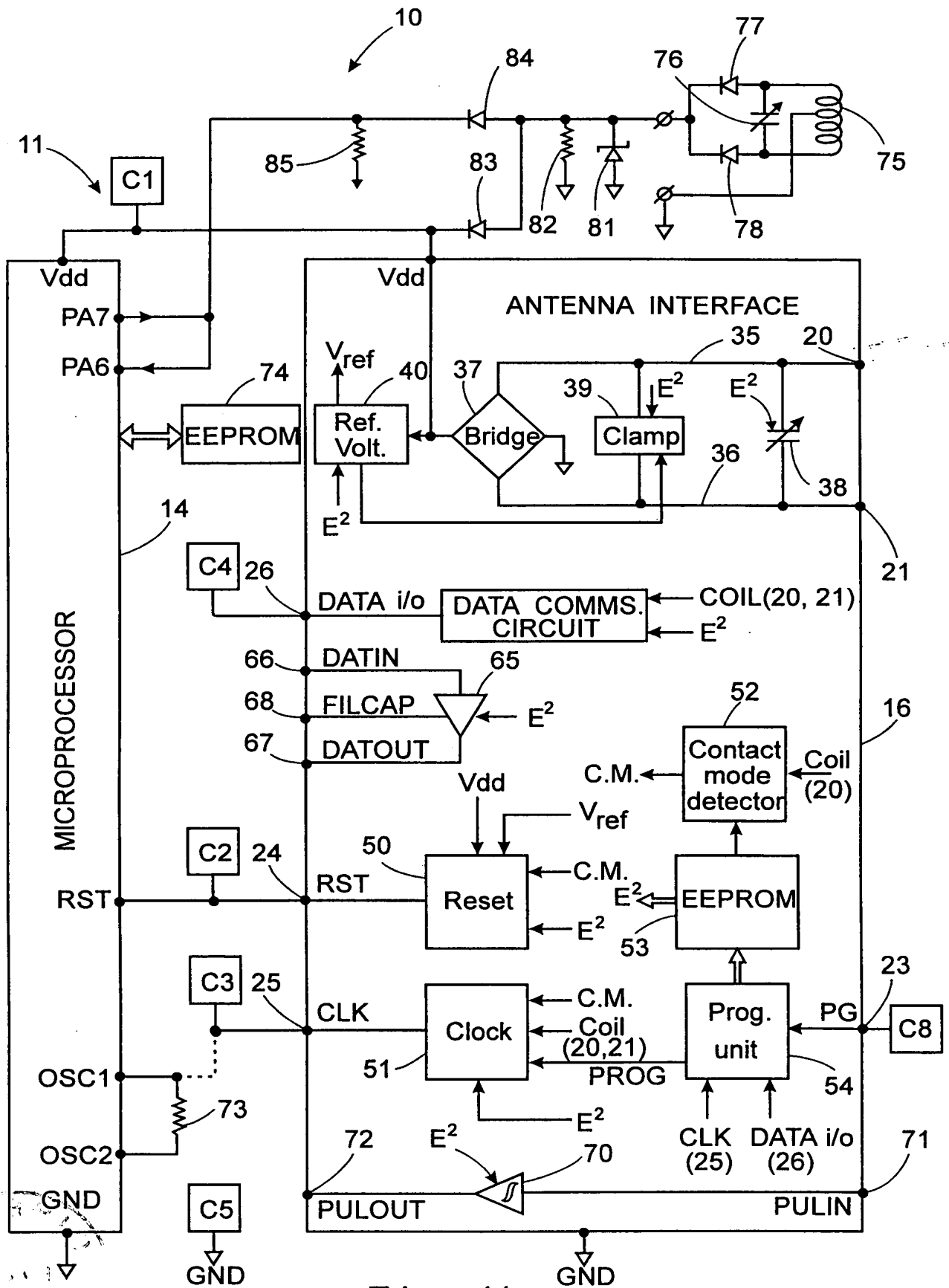


Fig. 11

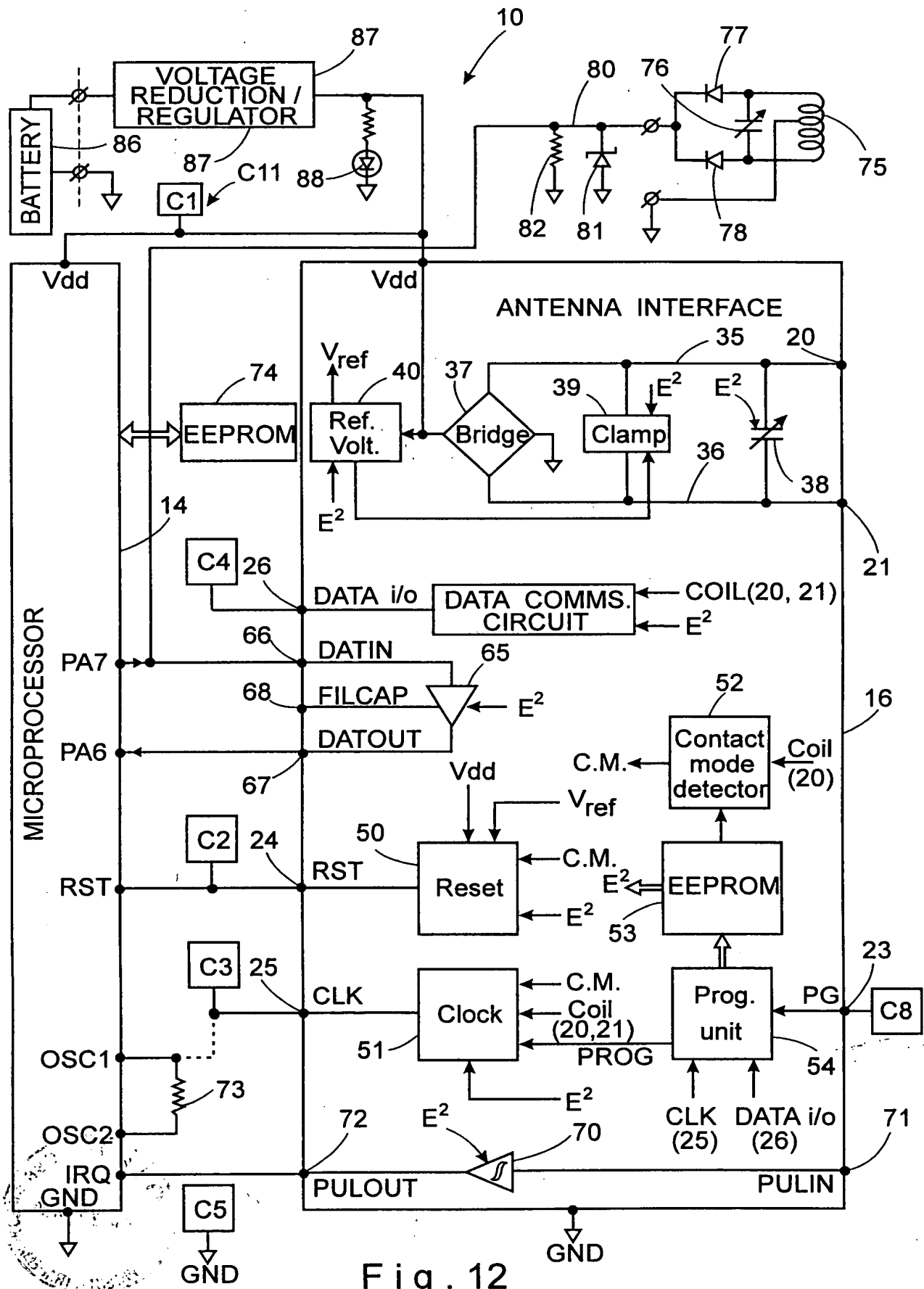


Fig. 12